

CYSTIDEA BARRANDE 1868 (CYSTOIDEA: GLYPTOCYSTITIDA):
PROPOSED SUPPRESSION UNDER THE PLENARY POWERS
Z.N.(S.) 1813

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This communication requests the International Commission on Zoological Nomenclature to reject for the purposes of the Law of Priority, but not for those of the Law of Homonymy, the genus-group name *Cystidea* Barrande, 1868.

2. In the following passage Barrande (1867, p. 179) introduced the binomina *Cystidea bohemicus* and *Cystidea sedgwicki*:

"Nous rappelons, que la bande d4 est l'horizon de notre division inférieure, qui fournait le plus de formes d'Échinodermes, dont quelques unes sont représentées par très nombreux individus, le plus souvent aplatis dans les couches schisteuses. Nous citerons comme exemples: d'abord *Echinosphaerites infaustus*, voisin de *Echinosph. aurantium* et dont les spécimens écrasés remplissent des couches entières. En second lieu, *Cystidea Bohemica* et *Cyst. Sedgwicki*, formes aux quelles nous nous réservons d'assigner plus tard un nom generique." Barrande 1867, p. 179.

As far as I am aware this constitutes the first use of *Cystidea* in a binomen and it is clear that Barrande intended *Cystidea* to be a collective group name, i.e. a name to cover a group of recognizable species, the generic assignment of which was uncertain or as yet unsettled. Both binomina are *nomina nuda* and *Cystidea* Barrande, 1867, is not an available generic name.

3. Barrande (1868, p. 694) published the binomen *Cystidea bavarica* for some cystoid fragments from Hof in Bavaria. This time, however, the binomen was accompanied by a description and *Cystidea* Barrande becomes available from this date. Barrande again expressly stated that *Cystidea* was not intended as a generic name:

"Wir kennen bloss die zwei abgebildeten Plättchen, nach welchen es gewagt sein würde, dieser Art einem Gattungsnamen zu geben." Barrande, 1868, p. 694.

4. Barrande (1887, pp. 82, 179–180, 188) again used *Cystidea* as a collective group name and added eight species each accompanied by a description and figure. He identified *Cystidea sedgwicki* Barrande, 1867, as *Dendrocystites sedgwicki* Barrande, 1887, (Barrande 1887, p. 142) but *Cystidea bohemicus* Barrande, 1867, was not identified. However, from the information given in the passage first quoted, it is evident that *Cystidea bohemicus* Barrande, 1867, became either *Aristocystites bohemicus* Barrande, 1887, or *Craterina bohemicus* Barrande, 1887 [= *Codiacystis bohemicus* (Barrande)]. The former is more likely.

5. Haeckel (1896, p. 152) used the binomen *Cystidea dubia* to describe some indeterminate plates figured by Barrande (1887, pl. 14, figs. 24–33) as "Plaquettes d'origine douteuse."

6. *Cystidea* Barrande, 1867, is a *nomen nudum*. *Cystidea* Barrande, 1868, although intended as a collective group name, contained only one species, *Cystidea bavarica* Barrande, 1868, which would become type-species by monotypy if *Cystidea* Barrande, 1868, were accepted as an available generic name. Although no author has accepted *Cystidea* as such there seems to be no reason to reject it. *Cystidea* Barrande, 1868, satisfies all the requirements of Article 11 of the règles and, despite its original author's intentions, constitutes a valid generic name as far as I can determine.

7. Callaway (1877, p. 670) described a new cystoid, *Macrocytella mariae* Callaway, from the Shineton Shales of Shropshire, England. *M. mariae* Callaway is the type-species of the genus *Macrocytella* Callaway, 1877, by monotypy.

8. Barrande (1887, p. 163) proposed a new genus *Mimocystites* type-species *Mimocystites bohemicus* Barrande, 1887.

9. Pompeckj (1896), p. 90 assigned *Cystidea bavarica* Barrande, 1868, to the genus *Macrocytella* Callaway, 1877, as did Sdzuy tentatively (1955, p. 270). Pompeckj further suggested that *Macrocytella* Callaway, 1877, and *Mimocystites* Barrande, 1887, were synonymous.

10. Bather (1899, p. 920) proposed the family MACROCYSTELLIDAE of which *Macrocytella* Callaway, 1877, is type-genus.

11. Pompeckj (1896, p. 90), Jaekel (1899, p. 171), Bather (1900, p. 56), and Cuénot (1953, p. 619), have all suggested that *Mimocystites* Barrande, 1887, and *Macrocytella* Callaway, 1877, are very closely related or perhaps identical. Those authors who refrained from accepting the former as a junior synonym of the latter did so partly because *Macrocytella mariae* Callaway, 1877, type-species of *Macrocytella*, was inadequately described and partly because Bather (1900, fig. 18) published an inaccurate reconstruction. Sdzuy (1955) was further misled by an inaccurate plate diagram published by Moore (1954) but concluded that the two genera were only separable if published figures were accurate. A redescription of *Macrocytella mariae* Callaway has now been given (Paul, 1967). In my opinion there is no doubt that *Cystidea bavarica* Barrande, 1868, *Macrocytella mariae* Callaway, 1877, and *Mimocystites bohemicus* Barrande, 1887, are congeneric and strict application of the law of priority would require that *Cystidea* Barrande, 1868, be accepted as the valid name for this fossil echinoderm. *Cystidea bavarica* Barrande, 1868, is not a *nomen oblitum* as it was cited in that form by Bassler and Moody (1943, p. 148) who were unaware that Pompeckj (1896) had referred it to *Macrocytella* Callaway. Bassler and Moody also cited *Cystidea*, but as a collective group name not a formal generic name, and they attributed it to Barrande, 1887, despite listing the earlier usage (Barrande 1868).

12. Unnecessary confusion would result from the replacement of *Macrocytella* Callaway, 1877, by *Cystidea* Barrande, 1868. *Macrocytella* Callaway, 1877, has been widely used in the literature and has been described and figured in text books and general treatises both in Zoology and Palaeontology in

English, French and German. It would cause considerable confusion if this familiar name were replaced by *Cystidea* Barrande, 1868, particularly as species assigned to *Cystidea* as a collective group name have been re-assigned to different echinoderm classes.

13. Of the twelve forms ascribed to *Cystidea* by Barrande (1867, 1868, 1887) and Haeckel (1896) one (*Cystidea sedgwicki*) is a solute "carpodid," one (*Cystidea bohemicus*) a diploporite cystoid, and one (*Cystidea bavarica*) a rhombiferan cystoid. The remaining nine have not subsequently been assigned to any recognizable genus. It is therefore suggested that the generic name *Cystidea* Barrande, 1886, be suppressed under the plenary powers. This would leave nine as yet unrecognizable "species" without an available generic name. However, it is still possible that all nine will be assigned to valid genera as their characters become better known. The alternative course of retaining *Cystidea* Barrande, 1868, will still leave these forms without an available generic name as they are clearly not congeneric with *Cystidea bavarica* Barrande, 1868.

14. The International Commission is therefore requested:

- (1) to use its plenary powers to suppress the generic name *Cystidea* Barrande, 1868, for the purposes of the law of priority but not for those of the Law of Homonymy;
- (2) to place the generic name *Macrocystella* Callaway, 1877 (gender : feminine), type-species, by monotypy, *Macrocystella mariae* Callaway, 1877, on the Official List of Generic Names in Zoology.
- (3) to place the specific name *mariae* Callaway, 1877, as published in the binomen *Macrocystella mariae* (type-species of *Macrocystella* Callaway, 1877) on the Official List of Specific Names in Zoology.
- (4) to place the specific name *bavarica* Barrande, 1868, as published in the binomen *Cystidea bavarica*, on the Official List of Specific Names in Zoology.
- (5) to place the family-group name MACROCYSTELLIDAE Bather, 1899 (type-genus *Macrocystella* Callaway, 1877) on the Official List of Family-group Names in Zoology.
- (6) to place the generic name *Cystidea* Barrande, 1868 (as suppressed under the plenary powers in (1) above), on the Official Index of Rejected or Invalid Names in Zoology.

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